


10

Norfolk Southern Corporation
Communications and Signal Department
99 Spring Street, S.W.
Atlanta, Georgia 30303

B. L. Sykes
Chief Engineer
C&S Engineering
404/529-2105

April 29, 2004

061-04.445; 061-04.501;
061-04.502; 061-04.503;
061-04.504

Mr. Michael E. Stead
Railroad Safety Program Administrator
Illinois Commerce Commissioner
527 East Capitol Avenue
P. O. Box 19280
Springfield, IL, 62794-9280

X-12193

704-0064

534388A

RECEIVED
MAY 6 2004

Illinois Commerce Commission
RAIL SAFETY SECTION

Dear Mr. Stead:


Please reference the Illinois Commerce Commission letter of December 23, 2003, regarding Stipulated Agreement No. 1068 for the installation of automatic warning devices at the Fifth Street, Entrance Avenue, Schuyler Avenue, Indiana Avenue (IL 50) and Greenwood Avenue highway rail grade crossings of the Norfolk Southern Railway Company's track, all located in the City of Kankakee, Kankakee County, IL, designated at crossings AAR/DOT 534 393L, MP: 101.41-5E; AAR/DOT 534 392E, MP: 101.27-5E, AAR/DOT 534 391X, MP: 100.74-5E; AAR/DOT 534 390R, MP: 100.71-5E; and AAR/DOT 534 388P, MP: 100.51-5E, respectively.

We are providing to you two copies each of the detailed estimate, material list and preliminary engineering for these projects. Included are an estimate, material list and preliminary sketch for constant warning equipment to be installed and maintained by the Canadian National Railway that includes the starts for Schuyler Avenue, Entrance Avenue and Indiana Avenue. The Canadian National Railway's estimate was not included in the original agreement or order and will need to be included as an estimated cost of these projects reimbursable by the state/city.

Also attached are the original and two (2) duplicates of the FORM 3 for this project.

Please advise if additional information is needed to assist in the preparation of this project for installation.

Sincerely,


B. L. Sykes

Attachment(s)

BLS\rhr\gbb\rd\rjs

Cc: Mr. T. W. Ambler, NS Corp., Norfolk, VA - w/copy of FORM 3
Ms. Cheryl Cathey, IL DOT - w/plans, material list and estimate

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

ORIGINAL

RECEIVED
MAY 6 2004

Petition for permission to make a major change in crossing protection, or to install new protection under 92 Illinois Administrative Code 1535.400 (d).

X-12193
T04-0064

Illinois Commerce Commission
RAIL SAFETY SECTION

Date: April 29, 2004

To the ILLINOIS COMMERCE COMMISSION:

The petitioner Norfolk Southern Railway Company shows

- (1) That it is a railroad company operating a line of railroad in the State of Illinois.
- (2) That petitioner proposes and hereby makes an application for authority to make a major change in crossing protection or to install new protection under 92 Illinois Administrative Code 1535.400(d) adopted by this Commission.
- (3) That the location of the crossing, nature of protection now established and proposed protection to be established, and other pertinent facts in connection therewith, are set forth in the statement attached to and forming part of this petition.
- (4) That petitioner's reasons and purpose, with reference to its said proposal are to:

Installation of Flashing Light Crossing Signals with Gates and 12" lenses. Front and back lamp assemblies on both signal masts at: Greenwood Avenue in Kankakee, Kankakee County, Illinois.

MP. KS-100.51, DOT: 534 388P

File No. 061-04.501

Project No. 04.0483

- (5) That the facts set forth in this petition and in the statement and plans or plats attached thereto, are, all of them, true and correct to the best of petitioner's knowledge and belief.

WHEREFORE, the petitioner prays that the Commission will, if deemed desirable by the Commission, set the aforesaid matter for a hearing, and that the Commission enter an order or adopt at resolution consenting to and granting authority for the making of the said proposed changes in or additions to the crossing protection.

Norfolk Southern Railway Company

By R. H. Ray
R. H. Ray, Administrator
Highway Grade Crossings

Thomas W. Ambler
(Attorney for Petitioner)

Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510-2191
(Attorney's Address)

DOCKETED

Statement, attached to and part of an application for permission to make a major change in crossing protection or to install new protection, under 92 Illinois Administrative Code 1535.400(d).

1. Name of Railroad Company: Norfolk Southern Railway Company
2. Crossing Number: 534 388P
3. Village or City: Kankakee
4. Name of Street or Highway: Greenwood Ave.
5. Public Agency Maintaining Highway: City
6. Protection now established:
- Flashing Light crossing Signals with Reflectorized Cross Buck and Bell.
-
-
-
7. Protection desired:
- Automatic Flashing Light Warning Devices with Gates and Bell. Train Detection Equipment
- controlled by Constant Warning Time Circuitry.
-
-
8. Number of main tracks One Other tracks None
9. Number of passenger movements:
- 6 a.m. to 6 p.m. None 6 p.m. to 6 a.m. None
10. Number of freight train movements:
- 6 a.m. to 6 p.m. Eight 6 p.m. to 6 a.m. Six
11. Approximate number of switch movements:
- 6 a.m. to 6 p.m. Three 6 p.m. to 6 a.m. Two
12. Maximum speed of trains at crossing on each track in each direction:
- North/East 25 M.P.H.
- South/West 25 M.P.H.
13. Passenger platforms served by tracks within the limits of track circuits, if any None

14. Where automatic signals or gates are proposed, approximate number of train or engine movements daily which would cause false indications or operation:

None

15. Nature and approximate amount of street or highway traffic over crossing:

5,700 A.A.D.T. including Trucks and Buses

16. In addition to the information listed hereinbefore in Form 3, attach a track plan or plat of the proposed crossing. This plan should show:

- (a) Width and surface of highway.
- (b) Highway intersections (including private driveways to be so indicated) and location of established highway signs or signals within 100 feet of crossing.
- (c) Location of tracks, switches and other railroad facilities such as block signals, etc. within limits of track circuits, present and/or proposed.
- (d) Where automatic protection is proposed, show proposed location of signals (side lights, cantilevers, etc., if any).
- (e) Show the length of each operating track section within the control limits of the crossing protection and its function.

ADDITIONAL INFORMATION

Drawing attached for question no. 16

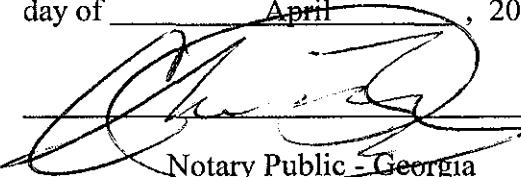
(File Original and Two Duplicates)

VERIFICATION

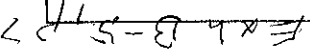
I, R. H. Ray, first being duly sworn upon oath depose and say that I am
Administrator – Highway Grade Crossings, of Norfolk Southern Railway Company, a
Virginia corporation; that I have read the above and foregoing petition by me subscribed and know the
contents thereof; that said contents are true in substance and in fact, except as to those matters stated upon
information and belief, and as to those, I believe same to be true.


Administrator - Highway Grade Crossings

Subscribed and sworn to before me this 29 th.
day of April, 20 04.


Notary Public - Georgia

My Commission Expires: _____



APPROACH LENGTHS ALLOW FOR:	CWT
TIME IN SECONDS	F.B./W.B. APPROACH
STANDARD MUTCD MIN. TIME	20
DESIGNED WARNING TIME	30
EQUIPMENT RESPONSE TIME	5
TOTAL TIME	35
MAX. SPEED (M.P.H.)	25
APPROACH DISTANCE (FEET)	1286

1. MAX. TRAIN SPEED 25 M.P.H.
2. LATITUDE N 41° 07' 48" LONGITUDE W 87° 51' 16"
ELEVATION 780'
3. SIGNAL "A" TO HAVE BELL.
4. LOCATE U/V UTILITIES & CABLE BEFORE DIGGING.
5. CROSSING LOCATED IN KANKAKEE COUNTY.
6. NEAREST STREET ADDRESS IS
840 N. GREENWOOD AVE.
7. NEAREST INTERSECTING STREET IS
SR-50
8. DISTANCE TO NEAREST INTERSECTING
STREET IS 275 FT.
9. THE AC LINES LOCATED IN QUADRANTS "A" & "B" ARE
OBSTRUCTIONS AND MAY NEED TO BE RAISED. PLEASE
CONTACT COMED AT 866-639-3532.
10. CITY/STATE TO MODIFY/REPAIR THE SIDEWALKS IS
"A" AND "B" TO ACCOMMODATE THE PLACEMENT OF THE
SIGNALS IN ACCORDANCE WITH MUTCD STANDARDS.

A B C D = QUADRANT MARKERS

IN SERVICE _____ SIGNED _____ DATE _____

☐ S&E ENGINEERING COPY

☐ CONSTRUCTION OFFICE COPY

RETURN TO S&E ENG. AFTER COMPLETION

☐ FIELD COPY

RETURN TO CASE AFTER COMPLETION

☐ PROJECT ENGINEER COPY

SCALE: 1" = 20'
PROJECT #04.00

SCALE: 1" = 20'
PROJECT #04.0483

LAYOUT

FILE 061-04.501
No.

**NORFOLK
SOUTHERN**

OFFICE OF ASS'T. VICE PRESIDENT
COMM. & SIGNAL- ATLANTA, GA.
M.P.: KS-100.51

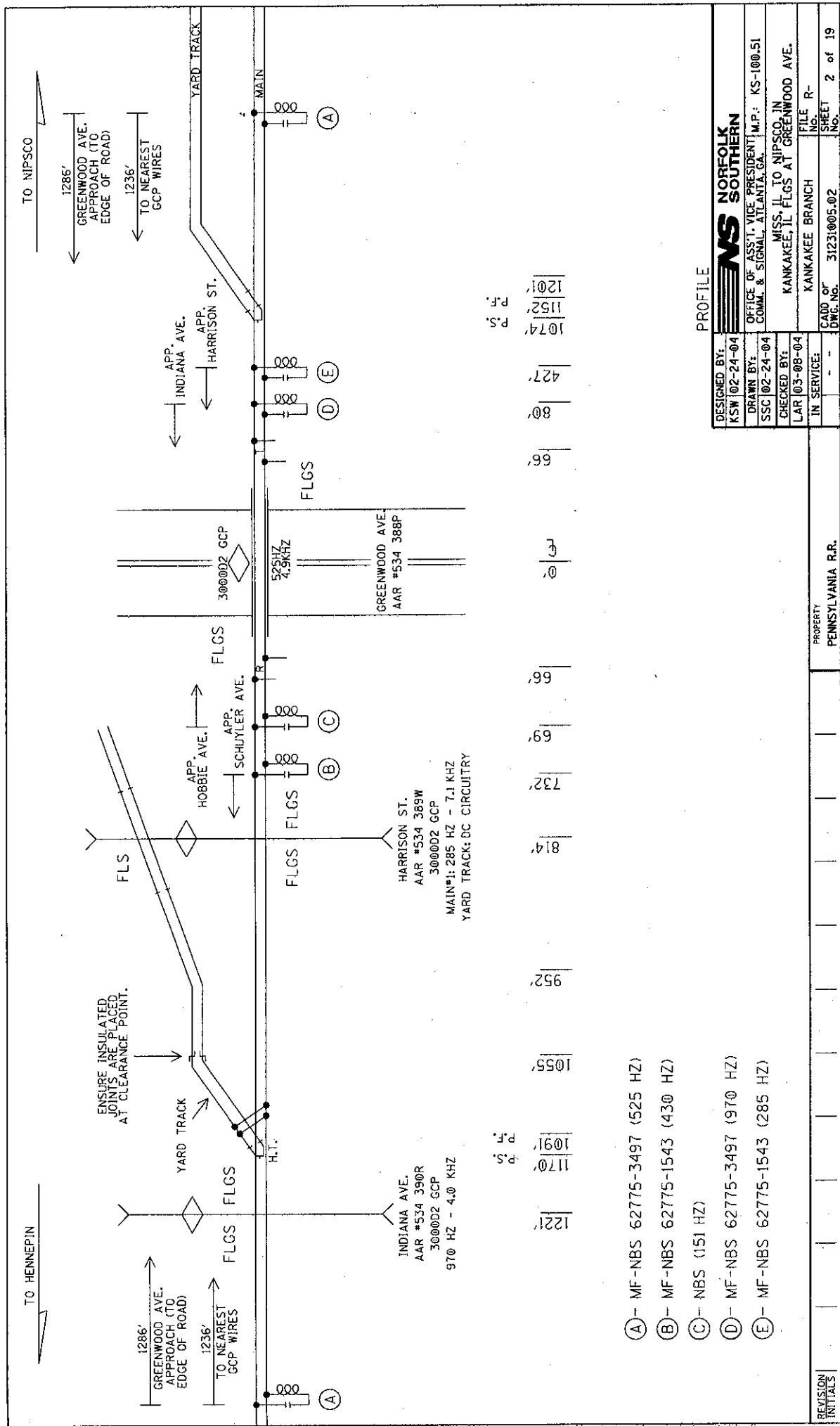
MISS. IL TO NIPSCO. IN
KANKAKEE. IL. ELGS AT GREENWOOD AVE.

KANKAKEE BRANCH	FILE R- No.
-----------------	----------------

CADD OF DWG. NO.	31231005.01	SHEET No.	1 of 1
---------------------	-------------	--------------	--------

PROPERTY
PENNSYLVANIA R.R.


REVISION
INITIALS



P.S.	P.F.
1221'	1074'
1170'	1152'
1091'	1201'
1055'	
952'	
814'	
732'	
69'	
66'	
0'	
66'	
80'	
427'	
1074'	

- (A) - MF-NBS 62775-3497 (525 HZ)
- (B) - MF-NBS 62775-1543 (430 HZ)
- (C) - NBS (151 HZ)
- (D) - MF-NBS 62775-3497 (970 HZ)
- (E) - MF-NBS 62775-1543 (285 HZ)

PROFILE

DESIGNED BY:	KSW 02-24-04	 NORFOLK SOUTHERN OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: KS-100.51 MISS. IL TO NIPSCO IN KANKAKEE, IL FLGS AT GREENWOOD AVE. KANKAKEE BRANCH FILE NO. R- CADD OR DWG. NO. 31231005.02 SHEET 2 of 19	
DRAWN BY:	SSC 02-24-04		
CHECKED BY:	LAR 03-08-04		
IN SERVICE:			
REVISION/INITIALS		PROPERTY	PENNSYLVANIA R.R.

19-Apr-04

Detailed Estimate for Grade Crossing Warning Devices

City/State: KANKAKEE, IL
MilePost: KS-100.51
State Proj. No.: STPRRP-000S
S&E Proj. No.: 04.0483
Man Days: 112

Road: GREENWOOD AVE.
DOT/AAR: 534388P
County: KANKAKEE
AFE: F01952
File Number: 061-04.501

*****Purchases - Other*****

Meals and Lodging:	\$9,750.00	
Rental of Equipment:	\$21,320.00	
(2 Trucks, 1 Backhoe w/ Trailer and 1 Pipe-Pusher for 28 Days)		
Construction Supervision Vehicle:	\$400.00	
Contingencies:	\$540.00	
Purchases - Other Total:		\$32,010.00

***** Material and Additives*****

Material Cost:	\$65,140.00	
Sales and Use Tax:	\$3,260.00	
Material Handling Freight:	\$3,260.00	
Material Total:		\$71,660.00

*****Labor and Additives*****

Labor Cost:	\$25,090.00	
(4 man crew at \$896.00 a day for: 28 days)		
Payroll Tax & Overheads:	\$21,720.00	
Preliminary Engineering:	\$7,940.00	
Construction Supervision:	\$7,080.00	
Labor Total:		\$61,830.00
Subtotal:		\$165,500.00
Credit:		\$0.00
(Salvage/Scrap)		
Project Total:		\$165,500.00

Estimated on: 19-Apr-04

Estimated by: ndney

Estimate valid for 1 year from date of estimate

Highway Crossing Signalization Program - Material List

Do not substitute items without permission from S & E Engineering

City:	KANKAKEE
Road:	GREENWOOD AVE.
Milepost:	KS-100.51
Drawing Number:	31231005
State Project Number:	STPRRP-000S
County:	KANKAKEE
A A R Number:	534388P
Project Number:	04.0483
File Number:	061-04.501
A F E Number:	F01952
Store Number:	06978
Supervisor:	J.W. WILSON
Tax Code:	1200
Vendor to supply the following copies after pricing:	
1 Set - Material Management with original invoice	
2 Sets - with plans shipped in car with material	
1 Set - S&E Gen. Supt. Construction w/ copy of invoice	

19-Apr-04

Exh B-5, p 2

Location: KANKAKEE		IL	S&E Proj. No.: 04.0483		AFE No.: F01952	Drawing No.: 31231005	Page 1/4			
Store No.: 06978		P.O. Number:			Date Required:	Date Shipped:	Vendor : Safetran Systems Corp.			
Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed		Quantity Returned (Credit)	Special Instructions
3	670-360693-4	EA	\$4.82	\$14.46	AARDOT NUMBER PLATE/DECAL, ORDER 3 PER PROJECT. 60 DAY LEAD TIME. SUPPLIED BY S'TRAN.					
1	165-006505-4	EA	\$1,028.00	\$1,028.00	AC SERVICE, COMPLETE LESS METER BASE, ASSEMBLED ON 30' POLE					
2	670-001404-4	EA	\$326.77	\$653.54	ARM, GATE FIBERGLASS-ALUMINUM 25-31 FT. L&W OR US&S OR SAFETRAN 076600-320017 OR					
13	105-871901-4	EA	\$154.22	\$2,004.81	BATTERY,GNB 265AH MODEL 50A11 SINGLE CELL 2.25 VOLTS					
1	670-503047-4	EA	\$185.75	\$185.75	BELL, CROSSING ELECTRONIC GENERL SIGNAL, EB-3-360-5 CR 02-044350					
2	670-980689-4	EA	\$63.71	\$127.41	BRACKET HIGH WIND, (RIGID 3'), WIG- 191036, WALRUS TUSK TYPE					
2	670-561375-4	EA	\$1,201.20	\$2,402.40	BRACKET, GATE SAVER, NEG385102GS, SPRING LOADED SWING AWAY ADAPTER FOR FIBERGLASS/ALUMINUM GATES, USE WITH GATE 28' AND LESS					
400	465-292862-4	LF	\$1.00	\$401.16	CABLE, U-2-6 TWISTED, S-23 OKONITE 113-12-3933 SOLID TINNED CONDUCTOR					
400	465-292929-4	LF	\$3.00	\$1,199.44	CABLE, U.G. 5 COND. NO. 6 AWG SOLID COPPER CABLE TO MEET NS CORP. SPEC. FOR SIGNAL					
400	465-939422-4	LF	\$2.56	\$1,023.40	CABLE, UG 12 CONDUCTOR NO 14 AWG SOLID EACH CONDUCTOR WITH 5/64 IN INSULATION 10 MIL					
300	465-277674-4	FT	\$2.80	\$841.23	CABLE, UG 3CD NUMBER 6 FOR HIGH CURRENT AC POWER OKONITE 206-11-6 243					
120	165-544477-4	FT	\$2.00	\$239.47	CONDUIT, 4"x10' PVC, SCHEDULE 80 BELL CONNECTOR AT ONE END, 1/2 PT. GLUE IN KIT 670-123298-4					
2	670-090450-4	EA	\$49.62	\$99.25	CONNECTOR,WELDED FAR RAIL HARMON A1000-2W					
2	670-486646-4	EA	\$40.66	\$81.32	CONNECTOR,WELDED NEAR RAIL HARMON A1000-1W					

5x4 B-5, P.3

Location: KANKAKEE		IL	S&E Proj. No.: 04.0483		AFE No.: F01952		Drawing No.: 31231005		Page 2/ 4	
Store No.: 06978		P.O. Number:			Date Required:		Date Shipped:		Vendor : Safetran Systems Corp.	
Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed.		Quantity Returned (Credit)	Special Instructions
2	670-794453-4	EA	\$854.30	\$1,708.61	COUNTERWEIGHT PKAGE, 25-31'GATE STAN S- MECH ONLY, STAINLESS TO INCLUDE HUB, SUPPORT ARMS					
4	670-760012-4	EA	\$34.90	\$139.59	COVER, FOR 1 WAY FLASHING LIGHT ASSY. 18 OZ. BLACK VINYL COATED NYLON. ====TO COVER 2 LAMPS=====					
1	670-986650-4	EA	\$361.26	\$361.26	DISPOSAL, CONSTRUCTION DEBRIS AND CLEANING X'ING EQUIPMENT CONTAINER					
1	670-000004-4	EA	\$281.44	\$281.44	FCC LICENSE FOR MONITOR/RADIO					
6	670-000003-4	EA	\$255.85	\$1,535.10	FILL/STONE #57, QUANTITY IS BASED ON TRUCK LOAD PLUS DELIVERY COST					
2	670-015231-4	EA	\$381.69	\$763.37	FOUNDATION,DIXIE,S-2 GATE 56" ASSEMBLED					
1	670-477991-4	EA	\$292.81	\$292.81	KIT, GROUNDING ASSY FOR AL I/S INCLUDES 8 GRD RDS,200#4WIRE,12 4 WIRE ONE-SHOTS. ERICO SBK206					
1	670-123298-4	EA	\$256.93	\$256.93	KIT, HARDWARE SUPPLIES REQUIRED X'ING P'CKAGES. WEB CONNECTORS FOR SHUNT(8EA) TAPE, AMPS,P'GUM PAINT,SLEEVES,TAGS,GLUE, 100 EA WHITE TAGS,)NE CAN BLUE MARKING PAINT ETC...					
2	670-764166-4	EA	\$907.09	\$1,814.18	LAMP ASSY, 5" MAST MTG. 2W IND. 20" BKGRD, FLX-12 W/BULB S'TRAN #042003-487XNS					
6	165-643547-4	EA	\$8.43	\$50.60	LAMP, 18 WATT 10 VOLT S-11 SC BAY 18S11/1SC CLEAR RWY SIGNAL UJ-71463 GE					
4	255-590880-4	EA	\$15.62	\$62.47	LOCK, AMERICAN LOCK MODEL H-10KA KEYED ALIKE TO PRIVATE KEYWAY D456 AND STAMPED "NS SIG"					
2	670-637778-4	EA	\$1,055.55	\$2,111.09	MAST, 5" ALUMINUM 13'10" WITH DOUBLE JCT. BOX BASE. S'TRAN P# 070519-11AX.					
2	670-521147-4	EA	\$2,932.81	\$5,865.62	MECHANISM, GATE MODEL S40, WITH CONTACT HEATER, COMPLETE W/RELAY S'TRAN # 074000-W00090					
4	670-001347-4	EA	\$57.98	\$231.90	PACKAGE, HARDWARE SIGN 5 IN. MOUNTING, SERRMI A1250-5, HARMON @200965-000, OR					

APPROVED BY STATE

APPROVED BY RAILROAD

CAR NUMBER

SEAL NUMBER

5-10-11
 B-5
 5-10-11

Drawing No.: 31231005

AFE No.: F01952

S&E Proj. No.: 04.0483

IL

Location: KANKAKEE

Vendor: Safetran Systems Corp.

Date Shipped:

Date Required:

P.O. Number:

Store No.: 06978

Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed		Quantity Returned (Credit)	Special Instructions
							Date Quan.	Date Quan.		
1	255-646807-4	EA	\$9.49	\$9.49	PADLOCK, SAFETRAN PART NO. 030399-29X SCREW TYPE FOR CIR CONTROLLER AND BTY. BOX					
1	670-514605-4	EA	\$8.43	\$8.43	PINNACLE, W-C SECT 1-11, 4"x5" REF K1 110-8 OR SAFETRAN NO. @035045-503X					
1	165-902002-4	EA	\$308.00	\$308.00	PROTECTOR, SURGE 120/240VAC, ERICO P/N EPD120/240TDFL					
4	465-002899-4	EA	\$20.88	\$83.51	REEL, CABLE DISPOSABLE FOR CROSSING SIGNAL PACKAGES					
2	435-805560-4	EA	\$6.25	\$12.50	SAND, 25LB BAG FOR CABLE ENTRANCE INTO THE SHELTER					
1	670-391911-4	EA	\$5,329.57	\$5,329.57	SEARII AUTOMATED INSPECTOR SYSTEM KIT, w/ 1- ILOD, 1-BSX, 2-GTS, 2-MTSS, 1-GFT, 1-VHFC, 2-RECORDER INTERFACE MODULE, 1- ECHELON CONNECTOR					
1	670-281280-4	EA	\$7,006.00	\$7,006.00	SHELTER BARE 6X6, ALUMN, FARADAY, W/CABLE CHUTES BEHIND TERMINAL BOARD, W/GEN. CONN. W/ADJUSTABLE PIERS, SAFETRAN P/N 058400-66-78A					
2	670-586967-4	EA	\$34.74	\$69.49	SHUNT COVER W/LAG SCREWS, 19"x19", SERRIMI #40271, ORDER 1 PER SHUNT					
2	670-688850-4	EA	\$370.27	\$740.53	SHUNT, MULTI-FREQ. #62775-3497 SAFETRAN NARROW BAND					
2	670-806648-4	EA	\$56.42	\$112.84	SIGN, X-BUCK, LESS HARDWARE, SAFETRAN 035200-X CR 02-490546					
2	670-751511-4	EA	\$35.58	\$71.17	SIGN, "1" TRACK, LESS HARDWARE SAFETRAN# 035207-1X					
2	670-006438-4	EA	\$10.54	\$21.08	TAPE 4" X 96" REFLECTIVE APPLY TO BACK OF X-BUCK SIGN. ONLY IN IA., IN., IL., AL. 035200-555X					
1	670-330382-4	RL	\$10.75	\$10.75	TAPE, THOR 3" DURATEC, ORANGE 1000' LENGTHS. "WARNING STOP DIGGING"					

5. 1. 5. 3. 4. 7

APPROVED BY STATE

APPROVED BY RAILROAD

CAR NUMBER

SEAL NUMBER

Location: KANKAKEE		IL	S&E Proj. No.: 04.0483	AFE No.: F01952	Drawing No.: 31231005	Page 4 / 4				
Store No.: 06978		P.O. Number:		Date Required:	Date Shipped:	Vendor : Safetran Systems Corp.				
Qty.	Class-Item-CD	UI	Price per Item	Total Price	Item Description	Quantity Shipped	Quantity Installed		Quantity Returned (Credit)	Special Instructions
1	670-258957-4	EA	\$25,580.50	\$25,580.50	WIRED RACK, 6X6 FARADAY, 20AMP SINGLE TRK SSCCIIIA, GCP3000D2, 2 CRAGG CHARGER, 2 RELAY RACKS, SAFTRAN P/N 20A 1TRK, USE WITH I/S 670- 281280-4 W/CABLE CHUTES BEHIND THE FARADAY SHIELD		Date Quan.	Date Quan.		

Total Material **\$65,140.46**

APPROVED BY STATE	APPROVED BY RAILROAD	CAR NUMBER	SEAL NUMBER



Arne Skrodal
Signal Design Officer
Signals & Communications

Canadian National Railway
17641 South Ashland Avenue
Homewood, Illinois 60430-1339

708-332-3271
708-332-3514 Fax

April 14, 2004
Kankakee, IL - PF

Mr. Gus B. Bankieris
Manager Highway Crossing Signal Engineer
Norfolk Southern Railway Co.
99 Spring St.
Atlanta, GA 30303

Dear Mr. Bankieris:

Attached are several copies of the estimate dated April 8, 2004 in the amount of \$105,080 and track plan for the necessary signal work by CN forces to install CWT through the interlocking plant at Kankakee, IL. The NS crossings proposed to be upgraded are Entrance Ave., Schuyler Ave. and Indiana Ave.

Sincerely,

A handwritten signature in black ink that reads 'Arne Skrodal'.

cc: G. L. Paris

ILLINOIS CENTRAL RAILROAD
ENGINEERING DEPARTMENT
SIGNALS AND COMMUNICATIONS

Kankakee, IL

Est 1007-401

Estimated cost of Signal work to provide two (2) crossing starts for
Norfolk Southern Railway within Interlocking limits.

Central Division

Val Sec IL-1

ICC ACCT	ITEM DESCRIPTION	QUANT.	UNIT	UNIT COST	TOTAL COST
	BCR ---				
	ADDITIONS AND BETTERMENTS -----				
	INSTRUMENT CASE, LOW DOUBLE	2.	EACH	3050.00	6100.00
	CASE PIER, AP-392	4.	EACH	70.00	280.00
	GCP3000D2, 80110-111	1.	EACH	18946.00	18946.00
	GCP3000D2, 80110-113	1.	EACH	21184.00	21184.00
	RECORDER INTERFACE, 80025	2.	EACH	250.00	500.00
	RELAY, ST, 500 OHM, 400004	5.	EACH	583.00	2915.00
	RECTIFIER, NRS, 20A	2.	EACH	429.00	858.00
	RECTIFIER, NRS, 5V5A	2.	EACH	238.00	476.00
	NARROW BAND SHUNT, 62775-3497	2.	EACH	431.00	862.00
	DUAL WIDE BAND SHUNT, 8A077	2.	EACH	334.00	668.00
	ADJUSTABLE INDUCTOR, 8A398-6	2.	EACH	400.00	800.00
	BATTERY CHOKE, 8A065A	2.	EACH	212.00	424.00
	BATTERY, NI-CAD, 165AH	20.	EACH	118.00	2360.00
	WIRE, 2c/6 TW	300.	FEET	0.29	87.00
	CABEL, 5c/14	1200.	FEET	0.36	432.00
	MISC. SIGNAL MATERIAL	1.	L.S.	2000.00	2000.00
	5 MAN GANG	8.	DAY	1100.00	8800.00
	PRELIMINARY ENGINEERING	1.	L.S.	5000.00	5000.00
	CONSTRUCTION ENGINEERING	1.	L.S.	275.00	275.00

Kankakee, IL

Est 1007-401

SUMMARY A&B

MATERIAL	58892.00 *
ACCT. HDLG. FRT. TRANSP. 0.14	8244.88
LABOR	8800.00 *
ENGINEERING	5275.00
LABOR ADDITIVE 0.8904	7835.52
ENGINEERING ADDITIVE 0.4132	2479.25
SUBSISTENCE	2400.00
RENTAL OF EQUIPMENT	1600.00
CONTINGENCIES	9553.35

TOTAL A&B	105080.00